BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

RA 1ST AND FINAL BILL

Name of work: Improvements and Asphalting to Roads at Durgaparameshwari Layout and Surrounding areas in Ward No. 09 (Vidyaranyapura), Vidyaranyapura Sub Division.

Estimated Cost : Rs. 50.00 Lakhs

Head of Account : P-1771

Name of Agency: Sri Ninganagowda V Patil, # 57/7, Sri Krishna Nilaya, 2nd Main Road, Ganganagara layout, Ganganagara, RT Nagar (P), Banagalore - 32.

Work order No: BBMP/EE/BTP/WO/119/2019-20 Dated: 25.10.2019.

Measurements Recarded on : 22/01/2020

SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Average Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			meters	meters	meters	meters	meters			
1	Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods etc complete as per specifications and directions of engineer in charge of the work								Cum	
	Qty as per Premeasurement Recorded vide E-MB Page No. 1 & 2 is							**775.13**	231.47	**179419.00**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3)								Sqm	
	Qty as per Premeasurement Recorded vide E-MB Page No. 3 & 4 is							**3726.81**	102.95	**383675.00**
3	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete								Sqm	
	Durugaparameshwari LO 1st Main									
		1	30.00			1.35		40.50		
		1	25.00			1.35		33.75		
		1	25.00			1.35		33.75		
		1	20.00			1.35		27.00		
		1	20.00			1.35		27.00		
	Durugaparameshwari LO 1st Cross									
		1	15.00			1.35		20.25		
		1	20.00			1.35		27.00		
		1	25.00			1.35		33.75		
		1	20.00			1.35		27.00		
	Durugaparameshwari LO 1st Cross									
		1	15.00			1.35		20.25		
		1	20.00			1.35		27.00		
		1	25.00			1.35		33.75		
		1	25.00			1.35		33.75		
		1	20.00			1.35		27.00		
		1	15.00			1.35		20.25		
	Durugaparameshwari LO 3rd Main									
		1	20.00			1.35		27.00		
		1	25.00			1.35		33.75		
	Durugaparameshwari LO 2nd Main									
		2	25.00			1.35		67.50		

Assistant Engineer

22/01/20

Assistant Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Average Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			meters	meters	meters	meters	meters			
		2	25.00			1.35		67.50		
	Durugaparameshwari LO 4th Main									
		2	30.00			1.35		81.00		
		2	25.00			1.35		67.50		
		2	25.00			1.35		67.50		
		2	25.00			1.35		67.50		
							Total Qty =	**911.25**		
							Qty Limited to =	**910.04**	686.35	**624606.00**
4	Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges etc complete as per specifications and directions of engineer in charge of the work.								Sqm	
	Qty as per Premeasurement Recorded vide E-MB Page No. 5 is							**1420.13**	88.24	**125312.00**
5	Wet Mix Macadam - Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density etc complete as per specifications and directions of engineer in charge of the work								Cum	
	Qty as per Premeasurement Recorded vide E-MB Page No. 6 is							**391.83**	1851.18	**725348.00**
6	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications.								Sqm	
	Qty as per Premeasurement Recorded vide E-MB Page No. 7 is							**1703.63**	33.34	**56799.00**
7	Providing and laying bituminous macadam on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixd material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour, HOM of machineries complete as per specifications. MORTH /Chapter 5 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 3.3 % VG-30 Bitumen								Cum	
	Qty as per Premeasurement Recorded vide E-MB Page No. 8 is							**85.18**	5134.88	**437389.00**
8	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries etc complete as per specification								Sqm	
	Qty as per Premeasurement Recorded vide E-MB Page No. 9 is							**4867.50**	4.9	**23851.00**
9	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.								Sqm	
				Qty Vide Item No. 08				4867.50		
							Total Qty =	**4867.50**	13.73	**66831.00**
10	Providing and laying bituminous concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % VG-30 Bitumen								Cum	

Assistant Engineer

22/07/20.

Assistant Executive Engineer

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SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Average Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			meters	meters	meters	meters	meters			
	Durugaparameshwari LO 1st Main									
	Ch: 0.00 to 30.00	1	30.00	6.20	6.00	6.10	0.04	7.32		
	Ch: 30.00 to 60.00	1	30.00	6.00	6.00	6.00	0.04	7.20		
	Ch: 60.00 to 75.50	1	15.50	6.00	6.00	6.00	0.04	3.72		
	Ch: 0.00 to 30.00	1	30.00	5.10	5.80	5.45	0.04	6.54		
	Ch: 30.00 to 60.00	1	30.00	5.80	6.00	5.90	0.04	7.08		
	Ch: 60.00 to 90.00	1	30.00	6.00	6.10	6.05	0.04	7.26		
	Ch: 90.00 to 120.00	1	30.00	6.10	6.10	6.10	0.04	7.32		
	Ch: 120.00 to 146.00	1	26.00	6.10	6.60	6.35	0.04	6.60		
	Durugaparameshwari LO 1st Cross									
	Ch: 0.00 to 30.00	1	30.00	4.90	5.20	5.05	0.04	6.06		
	Ch: 30.00 to 60.00	1	30.00	5.20	5.70	5.45	0.04	6.54		
	Ch: 60.00 to 90.00	1	30.00	5.70	5.70	5.70	0.04	6.84		
	Ch: 90.00 to 120.00	1	30.00	5.70	5.30	5.50	0.04	6.60		
	Ch: 120.00 to 149.20	1	29.20	5.30	6.10	5.70	0.04	6.66		
	Durugaparameshwari LO 1st Cross									
	Ch: 0.00 to 30.00	1	30.00	5.40	5.10	5.25	0.04	6.30		
	Ch: 30.00 to 60.00	1	30.00	5.10	6.10	5.60	0.04	6.72		
	Ch: 60.00 to 90.00	1	30.00	6.10	5.50	5.80	0.04	6.96		
	Ch: 90.00 to 120.00	1	30.00	5.50	5.70	5.60	0.04	6.72		
	Ch: 120.00 to 150.00	1	30.00	5.70	5.70	5.70	0.04	6.84		
	Ch: 150.00 to 180.00	1	30.00	5.70	5.70	5.70	0.04	6.84		
	Ch: 180.00 to 208.70	1	28.70	5.70	5.80	5.75	0.04	6.60		
	Durugaparameshwari LO 3rd Main									
	Ch: 0.00 to 30.00	1	30.00	5.60	5.40	5.50	0.04	6.60		
	Ch: 30.00 to 60.00	1	30.00	5.40	5.70	5.55	0.04	6.66		
	Ch: 60.00 to 90.00	1	30.00	5.70	5.60	5.65	0.04	6.78		
	Ch: 90.00 to 120.00	1	30.00	5.60	6.70	6.15	0.04	7.38		
	Ch: 120.00 to 150.00	1	30.00	6.70	5.90	6.30	0.04	7.56		
	Ch: 150.00 to 164.00	1	14.00	5.90	5.40	5.65	0.04	3.16		
	Durugaparameshwari LO 2nd Main									
	Ch: 0.00 to 30.00	1	30.00	4.70	6.00	5.35	0.04	6.42		
	Ch: 30.00 to 60.00	1	30.00	6.00	6.30	6.15	0.04	7.38		
	Ch: 60.00 to 90.00	1	30.00	6.30	5.60	5.95	0.04	7.14		
	Ch: 90.00 to 96.50	1	6.50	5.60	5.70	5.65	0.04	1.47		
	Durugaparameshwari LO 2nd Main 1st Cross									
	Ch: 0.00 to 10.00	1	10.00	4.65	4.40	4.53	0.04	1.81		
							Total Qty =	**195.09**		
							Qty Limited to =	**194.70**	7318.45	**1424902.00**
11	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications								Cum	
	Durugaparameshwari LO 1st Main									
	Ch: 0.00 to 30.00	2	30.00			0.10		6.00		
	Ch: 30.00 to 60.00	2	30.00			0.10		6.00		

Assistant Engineer

22/01/20

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SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Average Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			meters	meters	meters	meters	meters			
	Ch: 60.00 to 75.50	2	15.50			0.10		3.10		
	Ch: 0.00 to 30.00	2	30.00			0.10		6.00		
	Ch: 30.00 to 60.00	2	30.00			0.10		6.00		
	Ch: 60.00 to 90.00	2	30.00			0.10		6.00		
	Ch: 90.00 to 120.00	2	30.00			0.10		6.00		
	Ch: 120.00 to 146.00	2	26.00			0.10		5.20		
	Durugaparameshwari LO 1st Cross									
	Ch: 0.00 to 30.00	2	30.00			0.10		6.00		
	Ch: 30.00 to 60.00	2	30.00			0.10		6.00		
	Ch: 60.00 to 90.00	2	30.00			0.10		6.00		
	Ch: 90.00 to 120.00	2	30.00			0.10		6.00		
	Ch: 120.00 to 149.20	2	29.20			0.10		5.84		
	Durugaparameshwari LO 1st Cross									
	Ch: 0.00 to 30.00	2	30.00			0.10		6.00		
	Ch: 30.00 to 60.00	2	30.00			0.10		6.00		
	Ch: 60.00 to 90.00	2	30.00			0.10		6.00		
	Ch: 90.00 to 120.00	2	30.00			0.10		6.00		
	Ch: 120.00 to 150.00	2	30.00			0.10		6.00		
	Ch: 150.00 to 180.00	2	30.00			0.10		6.00		
	Ch: 180.00 to 208.70	2	28.70			0.10		5.74		
	Durugaparameshwari LO 3rd Main									
	Ch: 0.00 to 30.00	2	30.00			0.10		6.00		
	Ch: 30.00 to 60.00	2	30.00			0.10		6.00		
	Ch: 60.00 to 90.00	2	30.00			0.10		6.00		
	Ch: 90.00 to 120.00	2	30.00			0.10		6.00		
	Ch: 120.00 to 150.00	2	30.00			0.10		6.00		
	Ch: 150.00 to 164.00	2	14.00			0.10		2.80		
	Durugaparameshwari LO 2nd Main									
	Ch: 0.00 to 30.00	2	30.00			0.10		6.00		
	Ch: 30.00 to 60.00	2	30.00			0.10		6.00		
	Ch: 60.00 to 90.00	2	30.00			0.10		6.00		
	Ch: 90.00 to 96.50	2	6.50			0.10		1.30		
	Durugaparameshwari LO 2nd Main 1st Cross									
	Ch: 0.00 to 10.00	2	30.00			0.10		6.00		
		2	30.00			0.10		6.00		
		2	30.00			0.10		6.00		
		2	30.00			0.10		6.00		
		2	5.00			0.10		1.00		
							Total Qty =	**192.98**		
							Qty Limited to =	**192.60**	420.63	**81013.00**
							Sub Total			**4129145.00**
							GST @ 12%			**495497.00**
							Grand Total		=	**4624642.00**

Rupees Forty Six Lakh(s) Twenty Four Thousand Six Hundred Forty Two Only

Assistant Engineer
22/01/20

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